

INTERSTATE COMMERCE COMMISSION

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REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NEW YORK, SUSQUEHANNA & WESTERN RAILROAD NEAR GREEN POND JUNCTION, N. J., ON JUNE 23, 1925.

September 26, 1925.

To the Commission:

On June 23, 1925, there was a collision between two runaway freight cars, coupled, and a freight train on the New York, Susquehanna & Western Railroad near Green Pond Junction, N.J., resulting in the death of one employee and the injury of five employees.

Location and Method of Operation

Green Pond Junction is the junction point between the New York Susquehanna & Western Railroad and the Wharton & Northern Railroad. The New York, Susquehanna & Western main track extends from northwest to southeast in this immediate vicinity, and is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The Wharton & Northern Railroad maintains a yard at this point, about 1,500 feet in length, the tracks, extending westward from the junction switch, parallel each other, track centers being 12.5 feet apart, and are designated from north to south as follows: River track, W. & N. main track, Middle track, Back track. These tracks merge into the W. & N. main track, which serves as a lead track, at the east end of the yard, about 200 feet west of the junction switch. There is a derail, on the south rail of the lead track at a point 175 feet west of the junction switch, which works in conjunction with this switch, being in derailing position when the junction switch is lined for through movements on the New York, Susquehanna & Western main track. Approximately 50 cars a day are interchanged between these roads at this point. No special bulletins or instructions were in effect relative to the placing of cars on the tracks of this yard, known as Green Pond Junction yard. The runaway cars started from the back track of Green Pond Junction yard; proceeding eastward the yard tracks and lead track are practically tangent to the junction switch, while from this point the main track of the New York, Susquehanna & Western Railroad is practically tangent for a distance of 450 feet, followed by numerous short curves and tangents to the point of

collision, about 2.5 miles distant, which occurred on a 5° curve to the right about 950 feet in length, at a point about 350 feet from its western end. The grade for eastbound trains on the yard and lead tracks to the junction switch varies from 0.10 to 1.38 per cent descending, being 1 per cent on the lead track, while on the main track of the New York, Susquehanna & Western Railroad the grade is 1.40 per cent ascending from the junction switch to the point of accident and for about 1 mile beyond. The trains involved were in charge of employees of the New York, Susquehanna & Western Railroad.

It had been raining, but the rain had stopped at the time of the accident, which occurred at about 3:25 a.m.

Description

Eastbound freight train extra 56/62, en route from Beaver Lake to Undercliff, N.J., hauled by engines 56 and 62, in charge of Conductor Gouger and Enginemen Potter and Henry, respectively, arrived at Green Pond Junction at about 1:25 a.m. There was considerable switching to be performed at this point and while this work was in progress the deraill was left off the lead track, in which position the junction switch was lined for movements from the yard to the New York, Susquehanna & Western main track. In the course of this work N.E.C. box car 35003 was placed on the back track, after which P. & R. box car 10938 was coupled to its eastern end, both of these cars had wooden superstructures and steel-underframes, were of 80,000 pound capacity, and were loaded with cement. About 20 minutes after these cars were coupled, while work was being performed on the back track at the western end of the yard, the two box cars started to move eastward, at about 3:15 a.m., ran down the back track, out on the lead track, through the junction switch, and down the New York, Susquehanna & Western main track, and on reaching a point about 2.5 miles distant collided with extra 53/116.

Westbound freight train extra 53/116, en route from Undercliff to Beaver Lake, N.J., consisted of 23 cars and a caboose, hauled by engines 53 and 116, and was in charge of Conductor Kautz and Enginemen Titsworth and Kithcart, respectively. This train left Butler, 4.9 miles from Green Pond Junction, at 2:47 a.m., was considerably delayed on account of the heavy grade, full tonnage, and poor condition of the engines, and had reached a point only midway between Butler and Green Pond Junction, traveling at a speed of about 15 miles an hour, when it was struck by the runaway cars.

The head end of engine 53 climbed the east end of P. & R. box car 10938, telescoping this car for a considerable distance, engine 53 was badly damaged and its boiler was forced back against the tender, which in turn badly damaged the head end of engine 116. None of the other equipment in this train was derailed. The employee killed was the fireman of engine 53.

Summary of evidence

Conductor Gouger, of extra 56/62, stated that switching was being done with the air coupled and in use; the derail was also off the lead-track rail as it was necessary to leave open the switch leading to the New York, Susquehanna & Western main track in order to utilize that track in switching operations. M.F.C. box car 35003 was placed on the back track during the progress of this switching, he cut this car off and opened the angle cock, applying the air brakes, but he did not see Brakeman Petterson set the hand brake, although the brakeman was riding this car. Afterwards, P. & R. box car 10938 was coupled to the eastern end of car 35003, and Conductor Gouger stated that he watched the stack run out at the time, and, as is customary, placed a block of wood, about 1" or 1 $\frac{1}{2}$ " x 3", under a wheel at the east end of the car. No interchange inspection was made of car 10938 at the time it was placed on the back track, as it was not customary to make this inspection until they had made up the train. He did not know whether the air was applied on car 10938, and said that the hand brake was not set, as one hand brake should hold two cars. About 20 minutes afterwards, while switching near the west end of the yard, Enginemen Potter told Conductor Gouger that he thought he saw a car going out of the switch at the east end of the yard, and on looking in that direction the conductor saw the two box cars moving eastward, he immediately cut off the engine and instructed Enginemen Potter to endeavor to overtake the runaway cars. Conductor Gouger got off at the telephone booth and informed the operator at Butler, 4.9 miles distant, of the situation. Conductor Gouger afterwards went to the scene of the accident but on his arrival he did not feel the wheels on the runaway cars to see if they were hot, in order to determine whether the brakes had been applied. Subsequently, he found the wooden block that he placed under the wheel of P. & R. car 10938, outside the rail on the ties; there was no indication that it had been run over, and he was of the opinion that the block had been pushed off the rail owing to the slippery condition of the rail and wheel. Conductor Gouger further stated that Brakeman Petterson had worked with him at various times for the past 15 years and he had always found him thoroughly reliable.

ble, therefore, he depended solely upon him properly to apply the hand brake on M E.C. car 35003.

After the accident it was found that the brake rod on car 35003 had the shelve missing, however, Conductor Gouger stated that if this existed prior to the accident it probably would not have been detected by inspection. He further stated that it was his practice in switching cars at Green Pond Junction yard to apply the hand brakes on the rear, and to shove each car in, couple it, and pull out the slack to make sure they were coupled and that the cars would stand. He also said he was thoroughly familiar with the instructions governing the leaving of cars standing with hand brakes applied, and that air should be bled from the car and brakes applied on the head and rear ends when cars are set out, but said that in switching cars the air was not bled when the hand brake was set as there would be too much time lost in recharging when again coupling to them, which latter statement was verified by Brakeman Petterson.

Middle Brakeman Petterson, of extra 56/62 also stated that the switching was done with the air coupled and in working order, as is customary. When car 35003 was placed on the back track he applied the hand brake, and after the engineman applied the air he tightened the hand brake, but did not use a brake club as the air was in use on this car and consequently it would be very difficult to release the hand brake afterwards. He then stepped over to the next car, without bleeding the air from car 35003, as he knew they were going back after this car, and he said he also placed a block under one of the wheels. He further stated that the hand brake appeared to be an efficient brake and in his judgment should have held another car. Brakeman Petterson was the one who cut off car 10938, and he said he did not apply the hand brake, nor did he notice whether the hand brake on car 35003 was still applied. He was unaware of anything wrong until after the cars had started to run away.

Engineman Potter, of extra 56/62, stated that while switching at the west end of the yard he noticed the two box cars moving out of the east end of the yard, and immediately called Conductor Gouger, who instructed him to endeavor to overtake them. The engine was cut off and he proceeded as far as Kinney's Siding, at which point he had a meet with the train that collided with the runaway cars, and not seeing anything of these cars he returned to Green Pond Junction, notified the conductor, and they immediately went back to the point of collision. Fireman Pugh corroborated the statements of Engineman Potter.

Engineman Titsworth, of extra 52/113, said he was un-

were of anything wrong until he saw the runaway cars rounding the curve, apparently about 100 feet distant. Brakeman Henderschott was riding on the fireman's side of the cab and shouted a warning of danger about the time the engineer saw the runaway cars. The air brakes were not applied prior to the collision, at which time the speed was about 15 miles an hour.

After the accident an inspection of the brake rigging on car 35003 showed that the brake chain was anchored to the end sill and extended back to the hand-brake rod. The sheave which this type of brake rigging should have in the end of the hand-brake rod was missing and was replaced by a bolt, between 6 and 8 inches in length, around which the brake chain was passed to the brake shaft. The brake-shaft wheel was a 16 inch wheel, the ratchet wheel had 27 teeth on the underside, the brake pulley was engaged in the teeth of the ratchet wheel and there was one wrap of chain around the brake shaft. With the exception of the missing sheave the brake rigging appeared to have been in good condition prior to the accident.

Conclusions

This accident was caused primarily by leaving M. E. C. box car 35003 and P. & R. box car 10938, coupled, standing on a descending grade without being properly secured, resulting in the cars running out of the yard and colliding with a freight train moving in the opposite direction, for which Conductor Couger and Middle Brakeman Petterson are responsible.

The air brakes were applied at the time car 35003 was placed on the back track, and Brakeman Petterson said he set the hand brake on this car. Car 10938 was afterwards coupled to it and Conductor Couger said he placed a block or wedge under a wheel of car 10938, the hand brake, however, was not applied on this car. About 20 minutes later, while switching at the opposite end of the yard, the cars started to move, and apparently the wooden block was pushed off the rail, permitting the cars to run away. It seems clear either that the hand brake was not set sufficiently tight to hold two cars on the grade, or else that the hand brake on car 35003 was knocked loose when car 10938 was coupled to it.

According to the records, car 35003 passed Lake Junction, N.J., on the Wharton & Northern Railroad and was last inspected by inspectors of that railroad but no defect noted, it was delivered to the New York, Susquehanna & Western Railroad at Green Pond Junction at 8 p. m., June 22.

The investigation developed that it has not been unusual for cars to start moving of their own accord in this yard, and remarks on the trestle in the vicinity of the derrick indicated that cars had run off the derrick on previous occasions. Under the present arrangement the derrick on the lead track works in conjunction with the junction switch, and when a crew is switching at this point the derrick is off the rail of the lead track, thereby affording adequate protection under circumstances similar to those surrounding this accident. Serious consideration should be given to the possibility of providing additional safeguards at this point.

All the employees involved were experienced men. At the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W P. BORLAND,

Director.